

AMENDMENTS TO THE CLAIMS:

The below listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1-2. (Cancelled)

3. (Currently Amended) A restraining device for maintaining a self-expanding medical device on a delivery device, comprising:

a restraining sheath having an expandable housing portion adapted to receive and maintain the self-expanding medical device in a collapsed condition on the delivery device, the expandable housing portion being adapted to expand between a contracted position and an expanded position, the housing portion having sufficient column strength to maintain the self-expanding medical device in its collapsed condition on its delivery device, wherein:

the expandable housing portion is made primarily from an elastic material which is stretchable between the contracted position and expanded position and includes at least one reinforcing member associated therewith ~~for providing which provides~~ additional column strength to the housing portion but does not interfere with the expansion of the housing portion.

4. (Previously Presented) The restraining device of claim 3, further including:

a plurality of reinforcing members associated with the expandable housing portion to provide additional column strength to the housing portion.

5. (Previously Presented) The restraining device of claim 4, wherein:

the reinforcing members extend substantially along the length of the expandable housing portion but do not interfere with the expansion of the elastic material.

6. (Previously Presented) The restraining device of claim 5, wherein:

the reinforcing members are elongated bar-like members made from a material having high stiffness.

7. (Original) The restraining device of claim 3, wherein:
the elastic material is selected from a group of materials which includes silicone, polyurethane, polyisoprene, and lower durometer PEBAK.
8. (Previously Presented) The restraining device of claim 4, wherein:
the reinforcing member is made from a material selected from a group including stainless steel, polymeric material, and nitinol.
9. (Previously Presented) The restraining device of claim 8, wherein:
the reinforcing members are loaded with a material having high radiopacity.
10. (Previously Presented) The restraining device of claim 3, wherein:
the expandable housing portion is made from a substantially tubular-shaped material which is highly elastic and includes a plurality of reinforcing members disposed within the tubular elastic material to provide additional column strength to the housing portion.
11. (Previously Presented) The restraining device of claim 4, wherein:
the reinforcing members are disposed within the elastic material forming the expandable housing portion.
12. (Previously Presented) The restraining device of claim 4, wherein:
the reinforcing members are attached to the surface of the expandable housing portion.
13. (Previously Presented) The restraining device of claim 4, wherein:
each reinforcing member is disposed along the expandable housing portion to provide additional column strength to the housing portion but does not interfere with the expansion of the housing portion.
14. (Withdrawn) The restraining device of claim 2, further including:
coil spring associated with the expandable housing portion which provides column strength to the housing portion and is expandable from the contracted position to the expanded position with the elastic material which forms the housing portion.

15. (Withdrawn) The restraining device of claim 14, wherein:
the coils of the coil spring extend longitudinally along the length of the expandable housing portion.
16. (Withdrawn) The restraining device of claim 14, wherein:
the coil spring is made from a material selected from a group including nickel-titanium, spring steel and highly flexible plastic.
17. (Withdrawn) The restraining device of claim 2, further including:
a ring member disposed near the distal tip of the expandable housing portion.
18. (Withdrawn) The restraining device of claim 17, wherein:
the ring member has a plurality of undulations and is expandable with the elastic material which forms the housing portion.
19. (Withdrawn) The restraining device of claim 18, wherein:
the ring member is made from a material selected from a group including nickel-titanium, spring steel and highly flexible plastic.
20. (Previously Presented) The restraining device of claim 3, wherein:
the expandable housing portion includes a low expansion section with at least one expansion member disposed within the low expansion section to provide the elasticity needed to move the housing portion between the contracted position and expanded position.
21. (Previously Presented) The restraining device of claim 3, wherein:
the expandable housing portion includes a plurality of low expansion sections and a plurality of expansion members disposed between low expansion sections.
22. (Original) The restraining device of claim 21, wherein:
the low expansion sections are made from a material loaded with a material having high radiopacity.

23. (Original) The restraining device of claim 21, wherein:
the expansion members are made from an elastic material selected from a group which includes polyurethane, silicone, polyisoprene and lower durometer PEBAK.
24. (Original) The restraining device of claim 23, wherein:
the low expansion sections are made from a material selected from a group including cross-linked HDPE, polyolefin and polyamide.
25. (Original) The restraining device of claim 21, wherein:
the expansion members extend longitudinally along the length of the expandable housing portion.
26. (Original) The restraining device of claim 25, wherein:
the expansion members include means for preventing the low expansion sections from tearing as the expandable housing portion expands from the contracted position to the expanded position.
27. (Withdrawn) The restraining device of claim 2, wherein:
the expandable housing portion includes a distal tip section made from highly elastic material which is expandable and contractable between a contracted position and expanded position.
28. (Withdrawn) The restraining device of claim 27, wherein:
the distal tip section is made from a more elastic material than the remaining portion of the expandable housing portion.
29. (Withdrawn) The restraining device of claim 28, further including:
an expandable ring member associated with the distal tip section which is expandable between the contracted position and expanded position and is normally biased to the contracted position.

30. (Withdrawn) The restraining device of claim 29, wherein:
the ring member is encapsulated within the material forming the distal tip section.
31. (Withdrawn) The restraining device of claim 29, wherein:
the ring member is attached to the outer surface of the distal tip section.
32. (Withdrawn) The restraining device of claim 29, wherein:
the ring member is made from materials selected from a group including nickel-titanium, stainless steel and highly elastic plastic.

33-40. (Canceled)

41. (Previously Presented) A restraining device for maintaining a self-expanding medical device on a delivery device, comprising:
a restraining sheath having an expandable housing portion adapted to expand between a contracted position and an expanded position and to maintain the self-expanding medical device in a collapsed condition on the delivery device, and a reinforcing member associated with the expandable housing portion to cooperatively provide sufficient strength to the expandable housing portion to maintain the self-expanding medical device in its collapsed condition on its delivery device without the reinforcing member interfering with the ability of the expandable housing portion to move between the contracted and expanded positions.
42. (Previously Presented) The restraining device of claim 41, further including:
a plurality of reinforcing members associated with the expandable housing portion to provide additional column strength to the housing portion but which do not interfere with the ability of the expandable housing to move between the contracted and expanded positions.
43. (Withdrawn) The restraining device of claim 41, wherein:
the reinforcing member is embedded in the wall which forms the expandable housing portion.

44. (Previously Presented) The restraining device of claim 41, wherein:
the reinforcing member is an elongated bar-like member made from a material having a stiffness higher than the stiffness of the material used to form the expandable housing portion.
45. (Previously Presented) The restraining device of claim 41, wherein:
the expandable housing portion is made from an elastic material selected from a group of materials which includes silicone, polyurethane, polyisoprene, and low durometer PEBAX.
46. (Previously Presented) The restraining device of claim 41, wherein:
the reinforcing member is made from a material selected from a group including stainless steel, polymeric material, and nitinol.
47. (Previously Presented) The restraining device of claim 41, wherein:
the reinforcing member is loaded with a material having high radiopacity.
48. (Previously Presented) The restraining device of claim 41, wherein:
the expandable housing portion is made from a substantially tubular-shaped material which is highly elastic and includes a plurality of reinforcing members disposed within the tubular elastic material to provide additional column strength to the housing portion.
49. (Previously Presented) The restraining device of claim 41, wherein:
the reinforcing member is molded within the material used to form the expandable housing portion.
50. (Previously Presented) The restraining device of claim 41, wherein:
the reinforcing member is attached to the surface of the expandable housing portion.
51. (Previously Presented) The restraining device of claim 41, wherein:
the reinforcing member helps to bias the expandable housing portion in the contracted position.